REMARKS

This Amendment is a submission under 37 C.F.R. § 1.114 for a Request for Continued Examination (RCE).

In the Office Action, the pending claims were rejected as being obvious over various combinations of references. In particular, claims 1-4, 16, 30 and 44 were rejected as being obvious over published U.S. patent application Pub. No. 2001/0028399 to Conley in view of U.S. Pat. 6,674,461 to Klapman. The remainder of the pending claims (i.e., claims 6-15, 17, 18, 20-29, 31-34, 36-43 and 46-53) were rejected as being obvious over Conley in view of Klapman and further in view of U.S. Pat. 6,094,198 to Shashua. Applicants traverse the rejections as follows.

Although Applicants disagree with the rejections stated in the Office Action, Applicants have amended the independent claims of the application to clarify the claimed inventions in order to expedite allowance. For example, claim 1 has been amended to clarify that the step of "capturing images with the camera systems" includes "using parameters from a first of the camera systems and mapping data for the camera systems to compute pointing and optical parameters for the remainder of the camera systems." The parameters may be, for example, pointing (e.g., pan and tilt) and optical parameters (e.g., zoom and focus) parameters for systems using pan/tilt camera systems. For systems using static camera systems, the parameters may include just optical parameters, for example. Claim 1 has also been amended to clarify that the "mapping data" includes (1) data regarding the geometric relationship of the camera systems to the scene, (2) data regarding the relationship between the zoom and the angular field of view for each camera system, and (3) data regarding the relationship between the focus and the depth of field for each camera system. The other independent claims (claims 16, 30 and 44) have been

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amended in a similar manner. Support for these amendments may be found throughout the application as filed, including paragraphs [0044] and [0055] to [0059].

Applicants submit that the claims as amended are not obvious in view of the cited references for at least two reasons.

First, Conley fails to disclose or suggest applying a 2D projective transformation to captured images to superimpose a secondary induced motion on the trajectory of the cameras. The Office Action states that Conley shows this step at ¶ [0065], but the Office is mistaken. The morphing of image points described at paragraph [0065] of Conley is very different from the step of 2D projective image transformation recited in the pending claims. In this passage, Conley is describing the concept of using morphing to create, in effect, images from a virtual camera that would be situated between two existing cameras. The image content from the two existing cameras is changed (morphed) to create the virtual images of a virtual camera that would be in between the two existing cameras so that the impression of a rotating point-of-view can be achieved. In contrast, in the invention of claim 1, the captured images are merely 2D projective transformed (e.g., rotated or x-y translated) so that the point of interest is at the same position in each image. The content of the captured images is not affected. In Conley, the exact opposite happens -- the cameras have to be painstakingly prearranged to minimize misalignment errors. *See* Conley, ¶ [0026] to [0029]. In fact, the teaching of ¶ [0065] of Conley about image morphing is more akin to the steps recited in dependent claims 12, 13, 28, 29, 33, 34, 52 and 53 of the application about generating additional frames between actual image frames from a sparse set of cameras along the gross trajectory. This teaching is not relevant to the step of applying a 2D projective transformation to images captured by the camera systems.

Second, Conley fails to teach or suggest capturing the images with the camera systems situated around the scene where "parameters from a first of the camera systems and mapping data for the camera systems [is used] to compute pointing and optical parameters for the remainder of the camera systems," as recited in amended claim 1. In Conley, fixed (i.e., non-variable pointing) cameras are situated around the target area. *See* Conley, ¶ [0016] ("the cameras are fixedly mounted"). The fixed cameras are painstakingly situated prior to the event of interest to avoid (or minimize) misalignment errors, although such errors inevitably occur. *See* Conley, ¶ [0026] to [0029]. Since all of the cameras are fixed in Conley, Conley lacks a disclosure of the parameters from one of the camera systems, along with mapping data for the camera systems, being used to compute the parameters (e.g., pointing and optical parameters) for the remainder of the camera systems around the scene, as recited in amended claim 1 (and the other amended independent claims).

CONCLUSION

In view of the above, Applicants respectfully request withdrawal of the rejections and allowance of the claims. If the Examiner is of the opinion that the instant application is in condition for disposition other than allowance, the Examiner is respectfully requested to the

undersigned attorney at the telephone number listed below in order that the Examiner's concerns

may be expeditiously addressed.

Respectfully submitted,

Date: February 15, 2006

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